Remarks

This Application has been carefully reviewed in light of the Final Office Action mailed November 19, 2004. To advance prosecution, Applicants have amended Claims 1, 4-6, 10, 15, 19, and 22, and canceled Claims 3, 8-9, and 17-18. Certain of these amendments are not considered narrowing or necessary for patentability. Applicants have also added new Claims 23-25, none of which add any new matter. Applicants respectfully request reconsideration and allowance of all pending claims and consideration and allowance of all new claims.

I.   Applicants' Claims are Allowable over *Abramson*

The Examiner rejects Claims 1-4, 6-8, 11, 13, 15-17, 20, and 22 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,539,494 to Abramson, et al. ("*Abramson*").

Whether or not *Abramson* discloses, teaches, or suggests the limitations recited in Claims 1, 6, 15, and 22 prior to the amendments presented in this Response (which Applicants believe it does not), *Abramson* certainly does not disclose, teach, or suggest the limitations recited in Claims 1, 6, 15, and 22 as amended. For example:

- Claim 1 has been amended to incorporate certain limitations substantially similar (although not necessarily identical) to those recited in now-cancelled dependent Claims 3 and 9 (although dependent Claim 9 was written as a method claim that depended from independent Claim 6), and the Examiner did not reject Claim 9 as being anticipated by *Abramson*;
- Claim 6 has been amended to incorporate certain limitations substantially similar (although not necessarily identical) to those recited in now-cancelled dependent Claims 8-9, and the Examiner did not reject Claim 9 as being anticipated by *Abramson*;
- Claim 15 has been amended to incorporate certain limitations substantially similar (although not necessarily identical) to those recited in now-cancelled dependent Claims 17-18, and the Examiner did not reject Claim 18 as being anticipated by *Abramson*; and
- Claim 22 has been amended to incorporate certain limitations substantially similar (although not necessarily identical) to those recited in now-cancelled dependent Claims 3 and 9, and the Examiner did not reject Claim 9 as being anticipated by *Abramson*.

For at least these reasons, Applicants respectfully request reconsideration and allowance of independent Claims 1, 6, 15, and 22, as amended, and all claims that depend on independent Claims 1, 6, 15, and 22.

II.   Applicants' Claims are Allowable over the Proposed _Abramson-Hvasshovd_ Combination

The Examiner rejects Claims 5, 9-10, and 18-19 under 35 U.S.C. § 103(a) as being unpatentable over _Abramson_ in view of U.S. Patent 5,423,037 to Hvasshovd ("_Hvasshovd_"). Applicants respectfully disagree.

As discussed above, independent Claims 1, 6, 15, and 22 have been amended to incorporate certain limitations that are substantially similar (although not necessarily identical) to those recited in now-canceled dependent Claims 3, 8-9, and 17-18. Since the Examiner rejected now-canceled dependent Claims 9 and 18 based on the Examiner's proposed _Abramson-Hvasshovd_ combination and since independent Claims 1, 6, 15, and 22 have been amended to incorporate substantially similar (although not necessarily identical) limitations to those recited in now-canceled dependent Claims 9 and 18, Applicants will address those limitations with respect to the Examiner's proposed _Abramson-Hvasshovd_ combination. Applicants discuss amended Claim 1 as an example.

Applicants respectfully submit that the Examiner's proposed _Abramson-Hvasshovd_ combination fails to disclose, teach, or suggest at least the following limitations recited in Claim 1, as amended:

> the system operable to copy, when a particular one of the at least two remote session servers goes down, for each session for which a copy of its session data was stored on the particular remote session server, the session data for that session from the web server hosting that session to another remote session server of the at least two remote session servers such that the session data for that session will continue to be backed up on a functioning remote session server.

Abramson discloses an internet server session backup apparatus, which includes a computer system of a web site that uses three tiers of servers – web servers, application

servers, and backup servers. (Abstract) The backup servers are responsible for backing up the session data for particular application servers. (Abstract)

As purportedly disclosing the limitations recited in now-canceled dependent Claim 9, the Examiner cites the entire Abstract of *Hvasshovd* and states that "Hvasshovd taught the need to regenerate data made unavailable by node failure." (Final Office Action, Page 5) *Hvasshovd* discloses a database server computer system having multiple data processors called nodes. (Column 1, Line 67-Column 2, Line 1) To prevent any one hardware failure from causing the entire system to fail, the data processors are divided into at least first and second node groups, each node group sharing no resources (e.g., power supply and cooling system) with the other groups. (Column 2, Lines 9-14) Each database table in the system is divided into N fragments (N being the number of data processors in the system), and the records of the database table are allocated as evenly as possible among the table fragments. (Column 2, Lines 15-18) A "primary replica" of each fragment is stored on a corresponding one of the data processors, and for each primary replica, the system also generates at least one standby replica, which is a copy of the fragment's primary replica. (Column 2, Lines 22-26) Database transactions are performed using the primary replicas, and the standby replicas are updated using transaction log records. (Column 2, Lines 26-29) To ensure continued data availability after a single node failure, the primary and standby replicas for each fragment are stored in data processors in different node groups. (Column 2, Lines 29-33)

Every node of the system disclosed in *Hvasshovd* includes a data dictionary that stores information indicating where each primary and standby replica is stored among the system's data processors. (Column 2, Lines 34-37) A transaction manager on each system node responds to database queries by determining which fragment of a database is being accessed by the database query and then forwarding the database query to the data processor on which the primary replica of that fragment is stored. (Column 2, Lines 37-42) Upon failure of a data processor, each node changes the information in its data dictionary (a) to indicate that the primary and standby replicas stored on the failed data processor are not available, and (b) to indicate that for each primary replica stored on the failed data processor,

the corresponding standby replica is to be used in its place. (Column 2, Lines 43-49) Additionally, the replicas made unavailable by the node failure are regenerated from the other replicas in the system and stored in sub-fragments on the remaining available nodes of the database server, which according to *Hvasshovd*, redistributes the replicas made unavailable by the node failure over the remaining available nodes. (Column 2, Lines 50-55)

Applicants respectfully disagree that *Hvasshovd* discloses, teaches, or suggests the limitations recited in now-canceled dependent Claim 9 or that modifying *Abramson* with *Hvasshovd* would disclose, teach, or suggest the limitations recited in now-canceled dependent Claim 9. As can be seen from the above-discussed disclosures of *Hvasshovd*, *Hvasshovd* discloses backing up data fragments across data processing nodes. Each of the nodes in the system disclosed in *Hvasshovd* are in the same logical layer. As a result, the standby (i.e. back-up) data for a first node is provided by a second node in the same logical layer. The provision of standby data on different nodes within the same logical layer cannot be equated with the remote session servers and the web servers recited in Claim 1. Additionally, the standby data in *Hvasshavd* is pre-stored (and updated) on the second node prior to any failure of the first node. When a failure of the first node occurs, requests for the primary data of the first node are rerouted to the standby data provided on the second node. Additionally, the second node may regenerate a new copy of the standby data to replace the primary copy of the data made inaccessible by the failure of the first node and distribute the regenerated copy of the primary data to another functioning node in the system. While *Hvasshavd* may disclose, at best, the need to regenerate data due to a node failure, its architecture and solution are different than the limitations recited in Applicants' claims. *Hvasshavd* fails to disclose, teach, or suggest that its system is operable to "*copy, when a particular one of the at least two remote session servers goes down*, for each session for which a copy of its session data was stored on the particular remote session server, *the session data for that session from the web server hosting that session to another remote session server of the at least two remote session servers such that the session data for that session will continue to be backed up on a functioning remote session server*," as recited in Claim 1 as amended.

Moreover, even combining such disclosures of *Hvasshovd* with the disclosures of *Abramson* (assuming such combination is even technologically possible, which Applicants do not concede), the proposed *Abramson-Hvasshovd* combination would still fail to disclose, teach, or suggest at least the limitations of now-canceled dependent Claim 9 and the above-identified limitations recited in Claim 1 as amended. For example, the proposed combination would still fail to disclose, teach, or suggest a "*system operable to copy, when a particular one of the at least two remote session servers goes down, for each session for which a copy of its session data was stored on the particular remote session server, the session data for that session from the web server hosting that session to another remote session server of the at least two remote session servers such that the session data for that session will continue to be backed up on a functioning remote session server,*" as recited in Claim 1 as amended. In other words, even assuming that *Abramson* discloses the two logical layers clearly lacking from *Hvasshovd*, and even further assuming that the Examiner has demonstrated the required teaching, suggestion, or motivation in the references to modify the teachings of *Abramson* with the teachings of *Hvasshovd* in the manner the Examiner proposes, the proposed *Abramson-Hvasshovd* combination would still fail to disclose, teach, or suggest "*copy[ing] . . . for each session for which a copy of its session data was stored on the particular remote session server, the session data for that session from the web server hosting that session to another remote session server of the at least two remote session servers such that the session data for that session will continue to be backed up on a functioning remote session server*" "*when [the] particular one of the at least two remote session servers goes down,*" as recited in Claim 1 as amended.

For at least these reasons, Applicants respectfully request reconsideration and allowance of independent Claim 1, as amended, and its dependent claims. For at least analogous reasons, Applicants respectfully request reconsideration and allowance of independent Claims 6, 15, and 22, as amended, and their dependent claims.

III. **Claims 12, 14, and 21 are Allowable over the Proposed _Abramson-Beshears_ Combination**

The Examiner rejects Claims 12, 14, and 21 under 35 U.S.C. § 103(a) as being unpatentable over _Abramson_ in view of U.S. Patent 5,408,649 to Beshears, et al. (_"Beshears"_). Claims 12, 14, and 21 depend from independent Claims 1, 6, and 15, respectively, which Applicants have shown above to be clearly allowable over _Abramson_, as well as the proposed _Abramson-Hvasshovd_ combination. _Beshears_ fails to make up for the deficiencies of _Abramson_ and _Hvasshovd_. Thus, dependent Claims 12, 14, and 21 are allowable at least because of their dependence from independent Claims 1, 6, and 15, respectively. For at least these reasons, Applicants respectfully request reconsideration and allowance of dependent Claims 12, 14, and 21.

IV. **New Claims 23-25 are Allowable**

New Claims 23-25 depend from independent Claims 1, 6, and 15, which Applicants have shown above to be allowable over _Abramson_, as well as the proposed _Abramson-Hvasshovd_ combination, and are allowable for at least this reason. Additionally, new Claims 23-25 recite further patentable distinctions over the references of record.

For example, new Claim 23 recites:

The system of Claim 1, wherein a particular web server is operable to:
receive, substantially simultaneously, a plurality of updates to session data stored on the particular web server for a particular web session hosted by the particular web server;
queue the plurality of substantially-simultaneously-received updates;
lock the session data for the particular web session while updating the session data with each update in the plurality of updates such that the updates are made serially; and
communicate a copy of the updated session data stored on the particular web server to the remote session server corresponding to the particular web server only after all pending updates to the session data have been made.

New Claims 24-25 recite substantially similar limitations.

Abramson, *Hvasshovd*, and *Beshears*, whether considered alone or in combination, fail to disclose, teach, or suggest the limitations recited in new Claims 23-25.

For at least these reasons, Applicants respectfully request consideration and allowance of new Claims 23-25.

V. No Waiver

All of Applicants' arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the references cited by the Examiner. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are sufficient to overcome the Examiner's rejections.

Conclusion

Applicants have made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicants respectfully request full allowance of all pending claims.

If the Examiner believes a telephone conference would advance prosecution of this case in any way, the Examiner is invited to contact Christopher W. Kennerly, Attorney for Applicants, at the Examiner's convenience at (214) 953-6812.

Although Applicants believe no fees are due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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